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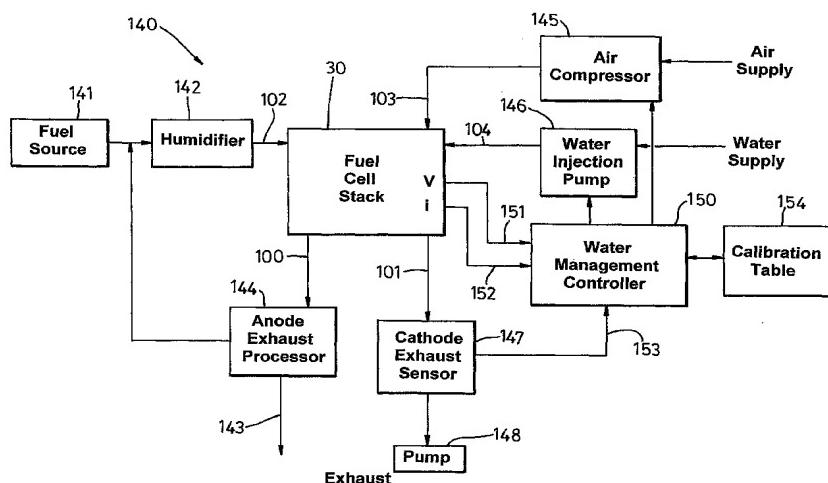
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(54) Title: WATER MANAGEMENT IN FUEL CELLS



(57) Abstract: An electrochemical fuel cell having an anode, an ion transfer membrane and a cathode has liquid water delivered to the fluid flow channels within the cathode so as to maintain a relative humidity of 100 % throughout the fluid flow channels. A calibration method and apparatus is described for determining an optimum quantity or range of quantities of liquid water to be delivered to the cathode fluid flow channels under varying operating conditions. An operating method and apparatus is described that ensures an optimum quantity of liquid water is delivered to the cathode fluid flow channels under varying operating conditions.

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